UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,540	10/12/2001	Genady Grabarnik	YOR920010746US1	1483

7590 04/27/2006	EXAMINER
Ryan, Mason & Lewis, LLP	LIN, KELVIN Y
90 Forest Avenue	

ART UNIT	PAPER NUMBER
2142	

Locust Valley, NY 11560

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/976,540	GRABARNIK ET AL.
	Examiner	Art Unit
	Kelvin Lin	2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>01 March 2006</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-18</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-18</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some *   c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Detailed Action

Response to Remarks

1.   Applicant's arguments with respect to claims 1-18 have been considered but they are not persuasive.

2.   Applicant argues that Cookmeyer only use the term off-line in the context of "expert analysis", and does not discloses in the context of a combined automatic data analysis and rule management methodology.

The Office respectively disagrees.

At col.5, l.40-44, Cookmeyer discloses the expert system performs the diagnostic assessment in accordance with an expert analysis algorithm, either as an "on the fly" or in an off-line manner on captured performance data files. That is the expert system performing the combination of diagnostic assessment (rule management methodology) and expert analysis algorithm (automatic data analysis) in the off-line. Moreover, at col.4, l.60, Cookmeyer discloses that the expert analysis of captured performance data from different vendor type protocol to perform offline protocol analysis. And, at Fig.9, and col.21, l.51-52, the expert system provides the GUI interface for user modify the rules and background interview, see col.22, l.13-33, (that is rule management) and performs the capture file in which the analysis is performed off-line (automatic rule analysis).

Therefore, Cookmeyer does disclose a combined automatic data analysis and rule management methodology.

Response to Amended Claims

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

1.   Claims 1-3, 7-18 are rejected under 35 USC 102(e) as being anticipated by

Cookmeyer II et al., (U.S. Patent 6529954).

2.   Regarding claim 1, Cookmeyer teaches apparatus for providing decision support

to an analyst in accordance with an event management system which manages a

network with one or more computing devices, the apparatus comprising: at least

one processor operative to perform (Cookmeyer, col.4, l.9-11):

- an automated off-line analysis of data representing past events

  associated with the network of computing devices being managed

  by the event management system, the automated analysis

  comprising generation of one or more visualizations of one or more

  portions of the past event data and discovery of one or more

patterns in the past event data (Cookmeyer, col.3, l.17-38, in which

a knowledge based expert analysis corresponds to a automated

analysis system, col.5, l.58-67, col.21, l.47-55, hereafter, the offline

implementation will refer to); and

- automated rule management comprising construction and

   validation of one or more rules formed in accordance with the

   automated off-line analysis of the past event data, wherein one or

   more rules are constructed offline and validated offline based

   directly on at least a portion of the one or more visualization

   generated offline from the corresponding offline analysis of the one

   or more portion of the past event data and the offline discovery of at

   least a portion of the one or more patterns in the past event data

   (Cookmeyer, Fig.9, col.3, l.17-20, l.32-38, col.4, l.60, col.5, l.58-67,

   and col.21, l.51-52, col.22, l.13-33); and

- memory, coupled to the at least one processor, which stores at

   least a portion of results associated with the automated event

   off-line analysis and off-line rule management operations

   (Cookmeyer, col.7, l.15-24)

3.   Regarding claim 2, Cookmeyer further discloses the apparatus of claim 1,

Wherein,

the past event data is obtained from an event database and the one or more

rules are provided to a rule database, the event database and the rule database

being associated with an execution system of the event management system.

(Cookmeyer, col.25, l.37-43).

4.   Regarding claim 3, Cookmeyer further discloses the apparatus of claim 2,

Wherein,

generation of the one or more visualizations of the one or more portions of the

past event data further comprises:

- selecting a subset of the past event data from the event database

    (Cookmeyer, col.22, l.13-33);

- generating a visualization of the subset of past event data using a

    visualization tool (Cookmeyer, col.21, l.47-55);

- the analyst reviewing the visualization to determine whether there

    are any groupings of events that are of interest presented therein

    (Cookmeyer, col.22, l.34-38);

    and

- performing an appropriate action when an event grouping of

    interest is found (Cookmeyer, col.22, l.41-47).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 4-6 are rejected under 35 U.S.C 103(a) as being unpatentable over

Cookmeyer in view of Hellerstein et al., (U.S. PG Pub No. 2002/0073195).

6.   Regarding claim 4, Cookmeyer teaches features of the invention substantially as

claimed, discovery of the one or more patterns in the past event data, selecting a

subset of the past event data from the event database (Cookmeyer, col.22, l.50-

63); generating a visualization of the one or more patterns using a visualization

tool (Cookmeyer, col.22, l.61-63, statistics corresponds to the pattern).the analyst

reviewing the visualization to determine whether there are any patterns of interest

presented therein (Cookmeyer, col.23, l.1-10); and performing an appropriate

action when a pattern of interest is found (Cookmeyer, col.23, l.28-33). Although

the above mentioned prior art teaches event analysis using visualization, not

including the mining algorithm.

        However, Hellerstein teaches mining the subset of the past event data

to discover the one or more patterns using a mining tool (Hellerstein, [0053], l.2-

12).

        Because knowing the selection of event or pattern may be augmented by

incorporating a data mining algorithm to aid in finding pattern of interest (see

Hellerstein, [0053], l.3-6), which can be used to modify the select the data source

as an off-line analysis of a capture data file and set-up software filter. (see

Cookmeyer, col.21, l.38-46). It would have been obvious to one ordinary skilled

in the art at the time the invention was made to incorporate the teaching of

Hellerstein for data mining algorithm as is well-known in the art to aid in finding

patterns of interest (Hellerstein, [0053], l. 5) with Cookmeyer's problem filter

(discovery) structure.

The motivation would be for offline data analysis, event management

using mining algorithm tool be implemented under Cookmeyer features to

perform offline expert, protocol analysis (Cookmeyer, col.5, l.60-63).

7.   Regarding claim 5, Hellerstein further discloses the apparatus of claim 2,

wherein validation of the one or more rules farther comprises :

- selecting a subset of the past event data from the event database

  (Hellerstein, [0052], l.1-3);

- finding one or more instances of patterns expressed in terms of

  left-hand sides of rules (Hellerstein, [0027], l.2-3);

- generating a visualization of the one or more pattern instances

  using a visualization tool (Hellerstein, [0023], l.13);

- analyzing the left-hand sides of rules using a rule validation tool

  (Hellerstein, [0026], l.5-8);

- displaying results of the analysis operation (Hellerstein, [0046], l.5-

  6, [0052], l.7-8);

- the analyst assessing analysis results (Hellerstein, [0028], l.1-2);

  and

- marking the rules as one of validated and not validated based on

  the assessment by the analyst (Hellerstein, [0023], l.16-18,[0028],

I.6-11).

8.   Regarding claim 6, Hellerstein further discloses the apparatus of claim 2, wherein

construction of the one or more rules further comprises:

- selecting a subset of the past event data from the event database

  (Hellerstein, [0052], I.1-3);

- mining the subset of the past event data to discover the one or

  more patterns using a mining tool (Hellerstein, [0025], I.2);

- assessing significance of the one or more patterns using a

  visualization tool (Hellerstein, [0023], I.13);

- constructing the one or more rules from a selected subset of the

  one or more patterns using a rule construction tool (Hellerstein,

  [0026], I.3-9); and

- writing the one or more rules in the rule database (Hellerstein,

  [0026], I.8-11).

9.   Regarding claims 7-12 have similar limitations as claims 1-6, the difference is

one is claimed for apparatus, and the other is claimed for method.

Therefore, claims 7-12 are rejected for the same reasons set forth in the

rejection of claims 1-6.

10.   Regarding claims 13-14 have similar limitations as claims 7-8, the difference is

one is claimed for method, and the other is claimed for manufacture.

Therefore, claims 13-14 are rejected for the same reasons set forth in the

rejection of claims 7-8.

11.   Regarding claims 15-16 have similar limitations as claims 1-2, the difference is

one is claimed for apparatus, and the other is claimed for means function.

Therefore, claims 15-16 are rejected for the same reasons set forth in the

rejection of claims 1-2.

12.   Regarding claims 17-18 have similar limitations as claims 1-2, the difference is

one is claimed for apparatus, and the other is claimed for event support system.

Therefore, claims 17-18 are rejected for the same reasons set forth in the

rejection of claims 1-2.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kelvin Lin whose telephone number is 571-272-3898.

The examiner can normally be reached on Flexible 4/9/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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Business Center (EBC) at 866-217-9197 (toll-free).

4/25/06
KYL

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER